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Original Research Article

Implication incidence age groups in cancer patients who suffer from death rumination disorder and employed psychological defense styles

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ABSTRACT

Background: Cancer is malignant disease with high risk of incidences which disease lead to stressful and pressure condition. This study was done to analyse age groups in cancer patients who suffer from death rumination disorder and employed psychological defense styles.
Methods: The study was done using two questionnaires such as: death rumination questionnaire and defense style questionnaire-60 (DSQ-60). Study was conducted in 200 patients who after oncologist diagnosis bedded in hospital. Investigation used all data collected analysed by SPSS version 21 software, the MANOVA test was used.
Results: In particular, 46-55 years old was in high risk of age group in cancer population, there was a statistical significant difference on death rumination disorder and employing psychological defense styles with regard to age. Age groups correlated with death focus factor of death rumination disorder. Age rank correlated with sublimation, self-assertion, splitting-self, help-rejecting, undoing, affiliation factors of defense styles.
Conclusions: Findings of this study revealed that there is difference between age groups, death rumination disorder and psychological defense styles in cancer patients. Death rumination is response of distress and death thinking which make by cancer diseases, then defense styles in patients encounter for adaptive with pressure and stressful condition of diseases.

Keywords: Age groups, Cancer patients, Death rumination, Psychological defense styles

INTRODUCTION

Nowadays cancer disease has attracted worldwide attention in all age rank. Cancer is spread abnormal cells, primary and next serious effect is tumor and metastatic of malignant cells.[1] According to the IRNA, it estimated cancer disease was second cause of death in Iran.[2] Patients with cancer diagnosis ought to give chemical therapy for treatment. Owing to the fact, situation and condition of treatment follow by high stress and death rumination. Therefore patients using psychological defense mechanisms to adaptive with disease condition and treatment meanwhile they respond stress. Actually, defense mechanisms happen in every patient.[3] In this study, we aim to look into estimated difference age groups in term of cancer patient's scores on death rumination disorder and employed psychological defense styles.

METHODS

The present investigation was conducted in 200 patients that they went into hospital and they bedded in oncology parts of hospital after diagnosis with cancer disease. Cases of cancer study getting various treatments such as surgery, chemotherapy and radiology. Patients should be

informed and consent to answered interview and questionnaire. Interview of each patient took approximately 45-60 minutes to complete the questionnaires. The study started from 12th April 2014 to 20th March 2015. Data collection was during 12 months.

Instrument

Two questionnaires were used including death rumination questionnaire and defense style questionnaire. Death rumination questionnaire was on the basis of Ruminative Responses Scale. RRS made by Nolon-Hoeksema. Death rumination questionnaire semi structured interviews and self-report inventories, baseline negative mood and self-criticism, this involving repetitive self-focused.[4,5]

It estimates 6 version of death rumination include: self-focus, self-critical, self-exhaust, death-focus, death-analysis, and dysfunctional-mood. Respondents answer each of the 13 items on a 5 point Likert scale with click of one (not at all applicable to me) and five (completely applicable to me). Defense style questionnaire (DSQ-60) created by Thygesen, Drapeau, Trijsburg, Lecours and de Roten, 2008. Self-report is cornerstone of DSQ questionnaire, defense style based in the 60 item model of the scale that it assesses 30 psychological defense styles such as: acting-out, affiliation, altruism, anticipation, denial, devaluation of self, devaluation of other, displacement, dissociation, fantasy, help-rejecting complaining, humour, idealization, intellectualization, isolation, omnipotence, passive aggressive, projection, identification, rationalization, reaction formation, repression, self-assertion, self-observation, splitting of self, splitting of other, sublimation, suppression, undoing, and withdrawal. Respondents answer each of the 60 items on a 9 point Likert scale with anchors of one (not at all applicable to me) and nine (completely applicable to me).[6]

The All questionnaires were checked for completion of information and the responses were coded for entry in the computer. Questionnaire data analyse was performed with Microsoft the statistical package for the social science (SPSS-pc) software version 21. Age rank was considering with frequency statistics and multivariate test assessment age rank with 30 styles of defense and 6 death rumination kinds, furthermore, all statistical tests were done to determine any significant difference at 5% level.

RESULTS

Total study patients were 200, in six age group from 18 till 83 years old, they bedded in hospital. study evaluate in cancer patients, they got various treatment meanwhile patients suffer from 6 type death rumination disorder hence they employed 30 kind of psychological defense mechanisms (mentioned in methodology part) consciously and unconsciously. Described of age groups in cancer patients research was 100 per cent. Age mean in cancer patients (44.74) years old and SD (16.95) with 95% interval confidence. Evidence indicate 46-55 age group was peak of incidence age groups which get more attention in cancer patients' population, the 36-45 years old was next vulnerability age group (Table 1).

Table 1: Incidence cancer in age groups.

Group	Variable (years old)	Frequency	Percent
1	18-25	31	15.5
2	26-35	34	17
3	36-45	42	21
4	46-55	44	22
5	56-70	31	15
6	71-83	10	9
	Total	200	100

(95% confidence interval)

Multivariate analysis was found that there was a statistically significant difference between six rank of age groups cancers' patients with death rumination disorder and employing psychological defense style, F(180.749)=1.42, p=0.001;Wilks'Lambda=0.25; partial eta squared=0.24, Bonforroni adjusted alpha level= 0.001 (Table 2).

Table 2: Effect age difference in death rumination and employed psychological defense styles.

Wilks' Lambda value square	F	P value	Partial Eta
0.25	1.423	0.001	0.242

(99% confidence interval)

Studies shows age groups related to number factors of death rumination disorder and psychological defense styles.

Factors related to age groups including: death focus was factor of death rumination disorder and sublimation, self-assertion, splitting-self, help-rejecting, undoing and affiliation were factors of psychological defense style. Self-assertion and affiliation were 99% confidence interval. Death-focus, sublimation, splitting –self, help-rejecting and undoing was 95% confidence interval (Table 3).

Table 3: Age groups relation with factors of death rumination and defense styles.

Factors	F	P value	Partial Eta square
Death-focus	2.93	0.014	0.07
Sublimation	2.28	0.048	0.05
Self-assertion	3.22	0.008	0.07
Splitting-self	2.38	0.04	0.06
Help-rejecting	2.46	0.035	0.06
Undoing	2.43	0.037	0.06
Affiliation	5.67	0.001	0.12

DISCUSSION

Present researches indicate 46 to 55 years old was major incidence age in cancer. According to the IRNA, it estimated cancer disease was second cause of death in Iran.[2] American Cancer Society Inc in 2015 reported, "cancer most commonly develops in older people; 78% of all cancer diagnoses are in people 55 years of age or older".[7] Researcher in 2015 shows, "cancer occurs in adults aged and younger than 50 years, however, cancer is high risk for people".[8]

National Cancer Registry, in 2015 found, "the median age of cancer patients at diagnosis will increase for all invasive cancers combined the percentage of patients aged over 70 is expected to increase, for females, from 31% in 2015 to 44% in 2025 and, for males, from 40% to 51%".[9] Liver cancer report in 2015 as a result indicated, "there will not only be more cancer patients, but they will be older on average. cancer in people living in less developed countries in Asia and Africa compared with those in more developed countries worldwide, the disease can develop at a younger age (typically around the age of 40)".[10]

Study indicates kind cancers was effective impact in death rumination and employing psychological defense styles for cancer patients, hence, death rumination disorder as high as kind cancer which is in high incidence rate. Death rumination is self-reflection of death thinking. There is highlight distinction between rumination and more adaptive forms of self-reflection, based in cognitive deficits or rumination, then, this correlated with neural and genetic state meanwhile, self-reflection could be power intervention against rumination feeling.[11] Rumination could be defined as prolong process and inflexible cognitive style.[12] Patients with negative feeling lead to death rumination especially death focus in treatment situation. There are synergistic effects of rumination and negative emotion progressively propagate and magnify then these predicting number of impulsive behaviors subsequently reported.[13]

Death rumination is hopeless response in patients, meanwhile death rumination related with part of brain and mental health. Rumination is typical of pathological grief responses in disaster condition.[14] Distinguishing of rumination condition and the other mental states is connectivity changes involving the amygdala part, it is to be important found.[15] Rumination is worse functioning on all mental health, this make Sleep problems.[16] Actually death rumination is responses of anxiety and depression mood to help patient to handle dissonance state and problem solving. Other studies implicate rumination as a mechanism of stress sensitivity and suggest pathways through which it may maintain depression and anxiety in everyday life.[17]

Oncologist diagnosis leads to stressful and depression mood hence patient engage death rumination. Stressful life events induce rumination, this is potentially useful targets that is preventing the onset of depression and anxiety.[18] Study shows the mediational effects of adaptive and maladaptive rumination in the relationship between illness perception and negative emotions.[19] Patients with oncologist diagnosis whereas suffer from death rumination disorder, patients persuade to using psychological defense styles due to patients adaptive with problem in conflict condition. Psychological defense styles improved by following dissonance experience because they lead to learn professional capacity and knowledge against error event.[20]

Developmental, personality, and social psychologists implication from defense styles which define psychological functioning.[21] Therefore, mechanisms defined as unconscious process, cognitive operations alter by developmental periods for protective function, and that can be assessment of personality and experimental schedules.[22] Individuals can promotion behavior in certain situation, patients need to adaptive with treatment condition.[23]

Hemodialysis patients use defense styles as psychological treatment against stressor and improve health quality of life then defense styles amenable patients for disease treatment.[24] Patients with hypertension diagnosis they widely encounter from defense styles and more developed ability for feeling.[25] Intestinal stoma patients indicate physical and psychological health problem, patients reflected level of self-image adaptation, meanwhile elderly patients use only a small part of defense styles as coping process.[26]

There is strong correlation between somatic and psychological data was appeared, as part of an original complex psychosomatic model ,patients with oncologist diagnosis using defense styles as coping strategies and emotional response to all condition of diagnosis.[27] end-stage renal patients employing passive–aggressive behaviors which is from defense style, this related to patients personality.[28] There is clinical attention toward ego defense mechanisms as indicators of distress and lowered survival in cancer patients, that the maturity of adaptive mechanisms must be controlled in behavioral-treatment of cancer patients.[29] Defense mechanisms were general acceptable regulation in patient populations hence, clinicians can use this as most effectively target defenses in psychotherapy.[30] Actually, defense styles happen in every patient.[3]

CONCLUSION

Findings of this study revealed that there is difference between age groups, death rumination disorder and psychological defense styles in cancer patients. Death rumination is response of distress and death thinking which make by cancer diseases, then defense styles in patients encounter for adaptive with pressure and stressful condition of diseases.

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